

Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



Ozark Cavefish

Amblyopsis rosae

Common name • Ozark Cavefish

Scientific name • *Amblyopsis rosae*

Federal status • Threatened

State status • Endangered

Ecology

The range of the Ozark cavefish includes just a small portion of the Ozarks in Missouri, Arkansas, and Oklahoma. In Missouri, they are found in the Springfield Plateau Region in the southwestern part of the state. Ozark cavefish live in small cave streams and springs with chert or rubble bottoms, or occasionally they may be found in pools with silt or sand bottoms. They feed on plankton, isopods, amphipods, crayfish, and salamander larvae. Bat guano and detritus brought in from outside the cave system provide a food source for many of the invertebrates on which cavefish feed. Ozark cavefish spawn from February to April, when water levels are high. Perhaps only 20 percent of mature females spawn each year. Adult Ozark cavefish reach a maximum length of 2.2 inches.

Reasons for Decline

Cave streams are affected by the activities on the surface of the ground. Cave species like the Ozark cavefish are vulnerable to pollution from cropfields, pastures, septic tanks, sewage lagoons, chemical spills, urban runoff, toxic metal from mines, and livestock and poultry waste. Ozark cavefish also may be affected by direct human disturbance through collection or by disturbance to the cave ecosystem through recreational caving. Any activity that reduces water quality affects cavefish.

Specific Recommendations

Species like the Ozark cavefish are indicators of clean, healthy aquatic systems. Their decline suggests that an underground water supply is not safe to drink. Following these recommendations will avoid or minimize impacts to cave systems and the Ozark cavefish.

→ Minimize sedimentation and chemical or nutrient-laden runoff into streams, sinkholes, caves, and abandoned wells by implementing and monitoring erosion and sediment controls for the duration of the project.

→ Establish and maintain forested buffers at least 100 feet wide along streams and around cave and sinkhole entrances.

→ Do not seal or alter cave entrances or sinkholes as cavefish depend on the outside environment for food and nutrients.

→ Take care to contain all construction debris to prevent its accidental introduction into caves, sinkholes, or springs as a result of clean-up activities, run-off, flooding, wind, or other natural forces.

→ Dispose of chemicals, toxic waste, garbage, and wash water from trucks in areas designated for such wastes. These sites should be away from caves and sinkholes.

→ Avoid entering caves to minimize disturbance to bats that provide nutrients for cave fauna.

→ If temporary roadways must be built, ensure that roadways are of low gradient with sufficient roadbed and storm water runoff drains and outlets.

→ Revegetate disturbed areas as soon as possible to minimize erosion.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers, Management Recommendations for Construction Projects Affecting Missouri Wetlands, and Management Recommendations for Construction Projects Affecting Missouri Karst Habitat.

Information Contacts

For further information regarding regulations for development in rivers, streams, wetlands, and karst habitat, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
608 E. Cherry Street, Room 200
Columbia, MO 65201
Telephone: 573/876-1911

Disclaimer

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